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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,793	05/04/2001	Shyh-Mei F. Ho	SVL920010041US1	1989
45728	7590	10/05/2006	EXAMINER	
SAWYER LAW GROUP LLP			PRICE, NATHAN E	
P.O. BOX 51418			ART UNIT	
PALO ALTO, CA 94303			PAPER NUMBER	
			2194	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,793

Applicant(s)

HO ET AL.

Examiner

Nathan Price

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

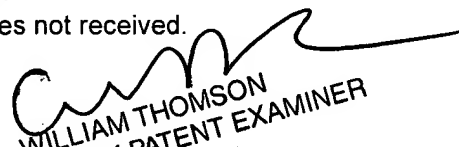
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. Claims 1 – 2 and 4 – 12 are pending. Claims 1, 8 and 11 have been amended. Objections and rejections not specifically included in this Office Action have been withdrawn.

Response to Arguments

2. Applicant's arguments filed 17 July 2006 have been fully considered but they are not persuasive.

Applicant argues that Ben-Shachar does not teach converting the request from the first language to a form for the mapping support language on the server. However, Ben-Shachar teaches translating “the application requests into formats of the database” (col. 5 lines 9 – 10). The requests are translated so that the database can understand them. Since the database receives requests and sends responses, it functions as a server (col. 5 lines 9 – 10, 13 – 14). Examiner has not relied upon Ben-Shachar to teach a mapping support language.

Applicant argues that Flanagan does not teach or suggest a mapping support language and combining Flanagan with Ben-Shachar would not produce the claimed invention. Examiner respectfully disagrees. Flanagan provides Basic Mapping Support map as an example of a host transaction map (col. 10 line 11). This can be imported from the host (Fig. 7 step 126). Therefore, Flanagan teaches importing a BMS map file from a host in order to create a host transaction (Fig. 7 step 126). The transaction map

is used to create the host transaction, which is sent to the host (col. 2 lines 21 – 24).

This at least implies that the host can be using a mapping support language. The transaction map is used to translate the transaction, which corresponds to translating application requests being sent to a database taught by Ben-Shachar (col. 5 lines 7 – 12).

Applicant also argues that the combination of Ben-Shachar and Flanagan fail to specifically teach a map, a map set and a map field. However, Ben-Shachar teaches a map (Fig. 10 shows MAPPING RECORD 1030.1 being mapped to SELF-DESCRIBING RECORD 1020), a map set (Fig. 10 shows MAPPING PACKAGE 1010 which provides a set of maps, specifically 1030.1 mapped to 1020 and 1030.2 mapped to 1020) and a map field (Fig. 10 shows fields, including MAPPING FIELD 1040.1). A description of Fig. 10 is given in col. 9 lines 9 – 22.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 401, 403, 405, 407 and 409 (see page 24, lines 22 – 28, of the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top

Art Unit: 2194

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Examiner acknowledges the annotated drawing received 17 July 2006, however, it does not appear that a Replacement Sheet has been received.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing

Art Unit: 2194

sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 5 – 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 5 – 10 appear to recite systems that can be implemented in software alone. The language of the claims raises the question of whether the claims include hardware required for the software to realize its functionality. Therefore, the claims are software, per se, and are rejected as being directed towards non-statutory subject matter.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2194

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 – 2 and 4 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Shachar (US 5,761,656) in view of Flanagan et al. (US 6,243,737 B1).

As to claim 1, Ben-Shachar discloses a method of processing an application request on an end user application and an application server (abstract; col. 5 lines 2 – 16) comprising:

- a) initiating the application request on the end user application in a first language with a first application program (col. 5 lines 6 – 10);
- b) transmitting the application request to the server and converting the application request from the first language of the first end user application to a form for the language running on the application server (col. 5 lines 3 – 12), wherein the end user application is connected to the application server through a connector (col. 5 lines 2 – 16, execution manager 150);
- c) processing said application request on the application server (col. 5 lines 6 – 15);
- d) transmitting a response to the application request from the application server to the end user application, and converting the response to the application request from the language running on the application server to the first language of the first end user application (col. 5 lines 12 – 17); and

Art Unit: 2194

e) wherein the connector is configured to (i) convert the application request from the first language of the first end user application as a source language to the language running on the application server as a target language (col. 5 lines 6 – 12), and (ii) convert a response to the application request from the language running on the application server as a source language to the first language of the first end user application as a target language (col. 5 lines 13 – 16), each comprise:

1) invoking connector metamodels of respective source language and target language (“mapping file” col. 5 lines 6 – 15);

2) populating the connector metamodels with metamodel data of each of the respective source language and target language, the metamodel data of the target language including a map, a mapset, and a mapfield (Figures 3 and 10; col. 5 lines 29 – 48; col. 9 lines 10 – 22); and

3) converting the source language to the target language (col. 9 lines 10 – 22).

Ben-Shachar fails to specifically disclose a mapping support language and a web server. However, Flanagan et al. disclose a mapping support language (col. 10 lines 1 – 16). It would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to combine these references because both references focus on providing server processing to clients by mapping requests between formats of the client and server. With respect to the web server, although it is not specifically stated that the connectors (execution manager in Ben-Shachar and transaction server in Flanagan) are web servers, it is at least implied by the references because Ben-

Art Unit: 2194

Shachar states that the execution manager can serve an HTML application (col. 2 lines 55 – 59) and Flanagan states that the client can be a web-based client (col. 3 lines 48 – 51).

As to claim 2, the method of claim 1 is rejected for the reasons above. Ben-Shachar discloses that the end user application is a web browser (col. 5 lines 29 – 33).

As to claim 4, the method of claim 1 is rejected for the reasons above. Ben-Shachar also discloses that the metamodel comprises invocation metamodel data, application domain interface metamodel data, transaction message metamodel data, and type descriptor metamodel data (col. 4 lines 30 – 36; col. 5 lines 2 – 12, 39 – 50).

As to claims 5 – 7, see the rejections of claims 1 and 2.

As to claims 8 – 10, see the rejections of claims 1 and 2.

As to claim 11, Ben-Shachar discloses a program product comprising a computer-readable storage medium having invocation metamodel data, application domain interface metamodel data, language metamodel data, and mapping metamodel data (col. 4 lines 30 – 36; col. 5 lines 39 – 50), said mapping metamodel data including a map, a mapset, and a mapfield (Figures 3 and 10; col. 5 lines 29 – 48; col. 9 lines 10 – 22); and computer instructions for building a metamodel data repository of source and target language metamodel data (col. 2 lines 32 – 43).

Ben-Shachar fails to specifically disclose a mapping support language.

However, Flanagan et al. disclose a mapping support language (col. 10 lines 1 – 16). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine these references because both references focus on providing

Art Unit: 2194

server processing to clients. See the rejections of claims 1 and 4 for further explanation.

As to claim 12, the program product of claim 11 is rejected for the reasons above. Ben-Shachar, as modified above to include mapping support languages, discloses that the metamodel data in the repository comprises invocation metamodel data, application domain interface metamodel data, mapping support language metamodel data, and type descriptor metamodel data (col. 4 lines 30 – 36; col. 5 lines 39 – 50).

Conclusion

9. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 7:30am - 4:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP


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